PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No.:		10/822,883	Confirmation No.: 4001
Applicant	:	Kenneth Merdan	
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Examiner	:	Elve, Maria Alexandra	
Title	:	INVERTED STENT CUTTING PROCESS	
Docket No.	:	1001.1748101	
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APPEAL BRIEF FILED UNDER 37 C.F.R. § 41.37

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Assistant Commissioner for Patents
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By _____
JoAnn Lindman

Dear Sirs:

Pursuant to 37 C.F.R. § 41.37, Appellant hereby submits this Appeal Brief in furtherance of the Notice of Appeal filed on November 11, 2009, and of the Notice of Panel Decision from Pre-Appeal Review dated mailed January 26, 2010. Appellant authorizes the fee prescribed by 37 C.F.R. § 41.20(b)(2) in the amount of $540 to be charged to Deposit Account No. 50-0413. Permission is hereby granted to charge or credit Deposit Account No. 50-0413 for any errors in fee calculation.

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee of record, Boston Scientific Scimed, Inc., a corporation organized and existing under and by virtue of the laws of Minnesota, and having a business address of One Scimed Place, Maple Grove, MN 55311-1566. An assignment from the inventors, Kenneth Merdan and Matt Shedlov, conveying all right, title and interest in the invention to SciMed Life Systems, Inc. has been recorded at Reel 015290, Frame 0370. A Change of Name from SciMed Life Systems, Inc. to Boston Scientific Scimed, Inc. has been recorded at Reel 018505, Frame 0868.

II. RELATED APPEALS AND INTERFERENCES

There are no other known appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 1, 5-8, and 11-19 are pending in the application. Claims 2-4, 9-10, and 20-29 have been canceled from the application.

Claims 1, 5, 7-8, 11-17, and 19 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Acciai et al. (U.S. Patent No. 5,855,802) in view of Pacetti et al. (U.S. Patent No. 6,695,920), McCoy (U.S. Published Patent Application No. 2003/0234243), and Applicant's Admitted Prior Art (AAPA).

Claims 1, 5, 7-8, 11-17, and 19 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Acciai et al. (U.S. Patent No. 5,855,802) in view of Pacetti et al. (U.S. Patent No. 6,695,920), McCoy (U.S. Published Patent Application No. 2003/0234243), and Kranz (U.S. Patent No. 6,197,047).

Claims 6 and 18 stand finally rejected under 35 U.S.C. 103(a) as being unpatentable over Acciai et al. (U.S. Patent No. 5,855,802) in view of Pacetti et al. (U.S. Patent No. 6,695,920), McCoy (U.S. Published Patent Application No. 2003/0234243), and (Applicant's Admitted Prior Art (AAPA) or Kranz (U.S. Patent No. 6,197,047)) and further in view of Magnante (U.S. Patent No. 6,086,204).

Claims 1, 5, 7-8, 11-19 are currently being appealed.

IV. STATUS OF AMENDMENTS

No amendments subsequent the final rejection of August 10, 2009 have been presented.

V. SUMMARY OF CLAIMED SUBJECT MATTER*

The invention relates generally to a device for manufacturing medical devices of use in medical procedures, and more specifically to a laser cutting device for manufacturing stents.

Turning now to independent claim 1, which is directed to a device (see for example, reference numeral 110; Figs. 2 and 3; page 4, lines 14-23, page 5, line 19 to page 6, line 20, page 8, lines 7-17, page 9, lines 8-12, page 10, lines16-22) for manufacturing an intravascular stent, comprising: a base (see for example, reference numeral 124; Figs. 2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16, page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21) having a first surface (see for example, reference numeral 140; Fig. 2; page 9, lines 20-21) and a second surface (see for example, reference numeral 130; Fig. 2; page 5, lines 6-7); a laser cutting system (see for example, reference numeral 112; Figs. 2 and 3; page 4, lines 14-18, page 5, line 19 to page 6, line 4, page 8, lines 9-11, page 9, line 18 to page 10, line 15, page 12, line 17 to page 13, line 5) attached to the first surface (see for example, reference numeral 140; Fig. 2; page 9, lines 20-21) of the base (see for example, reference numeral 124; Figs. 2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16, page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21), wherein the laser cutting system (see for example, reference numeral 112; Figs. 2 and 3; page 4, lines 14-18, page 5, line 19 to page 6, line 4, page 8, lines 9-11, page 9, line 18 to page 10, line 15, page 12, line 17 to page 13, line 5) includes a laser/water jet hybrid (see for example, reference numeral 112; page 10, lines 11-15); a linear motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23) attached to the second surface of the base (see for example, reference numeral 124; Figs.

* The references to the specification and drawings provided herein are exemplary, and not deemed to be limiting as support may be found throughout the specification and in many of the Figures.

2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16, page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21); a rotary motor (see for example, reference numeral 120; Figs. 2-3; page 4, lines 14-22, page 5, line 11 to page 6, line 4, page 7, lines 15-16, page 9, lines 8-17, page 12, lines 18-23) coupled to the linear motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23), wherein the rotary motor (see for example, reference numeral 120; Figs. 2-3; page 4, lines 14-22, page 5, line 11 to page 6, line 4, page 7, lines 15-16, page 9, lines 8-17, page 12, lines 18-23) is positioned below the linear motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23); a workpiece (see for example, reference numeral 16; Figs. 1-3; page 2, line 8 to page 3, line 16, page 4, lines 16-18, page 6, lines 14-15, page 7, lines 7-19, page 8, lines 9-15, page 9, line 23 to page 10, line 6, page 10, line 16 to page 12, line 17, page 12, line 18 to page 13, line 5) coupled to the rotary motor (see for example, reference numeral 120; Figs. 2-3; page 4, lines 14-22, page 5, line 11 to page 6, line 4, page 7, lines 15-16, page 9, lines 8-17, page 12, lines 18-23), the workpiece (see for example, reference numeral 16; Figs. 1-3; page 2, line 8 to page 3, line 16, page 4, lines 16-18, page 6, lines 14-15, page 7, lines 7-19, page 8, lines 9-15, page 9, line 23 to page 10, line 6, page 10, line 16 to page 12, line 17, page 12, line 18 to page 13, line 5) positioned below the linear motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23); a pre-cut guide (see for example, reference numeral 138a, Fig. 2, page 8, lines 7-17) coupled to the workpiece (see for example, reference numeral 16; Figs. 1-3; page 2, line 8 to page 3, line 16, page 4, lines 16-18, page 6, lines 14-15, page 7, lines 7-19, page 8, lines 9-15, page 9, line 23 to page 10, line 6, page 10, line 16 to page 12, line 17, page 12, line 18 to page 13, line 5); and a post-cut guide (see for example, reference numeral 138b, Fig. 2, page 8, lines 7-17) coupled to the workpiece (see for example, reference numeral 16; Figs. 1-3; page 2, line 8 to page 3, line 16, page 4, lines 16-18, page 6, lines 14-15, page 7, lines 7-19, page 8, lines 9-15, page 9, line 23 to page 10, line 6, page 10, line 16 to page 12, line 17, page 12, line 18 to page 13, line 5).

Turning now to independent claim 13, which is directed to a device (see for example, reference numeral 110; Figs. 2 and 3; page 4, lines 14-23, page 5, line 19 to page 6, line 20, page 8, lines 7-17, page 9, lines 8-12, page 10, lines16-22) for cutting a stent from a tube, comprising: a base member (see for example, reference numeral 124; Figs. 2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16, page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21) having a top surface (see for example, reference numeral 140; Fig. 2; page 9, lines 20-21) and a bottom surface (see for example, reference numeral 130; Fig. 2; page 5, lines 6-7); a first motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23) having a top surface (see for example, reference numeral 126; Fig. 2; page 5, lines 3-4) and a bottom surface (see for example, reference numeral 128; Fig. 2; page 5, lines 4-7, page 6, line 21 to page 7, line 3), the bottom surface (see for example, reference numeral 128; Fig. 2; page 5, lines 4-7, page 6, line 21 to page 7, line 3) of the first motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23) being attached to the bottom surface (see for example, reference numeral 130; Fig. 2; page 5, lines 6-7) of the base member (see for example, reference numeral 124; Figs. 2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16, page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21), such that the first motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23) is attached upside-down to the base member (see for example, reference numeral 124; Figs. 2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16, page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21); a laser cutting device (see for example, reference numeral 112; Figs. 2 and 3; page 4, lines 14-18, page 5, line 19 to page 6, line 4, page 8, lines 9-11, page 9, line 18 to page 10, line 15, page 12, line 17 to page 13, line 5) attached to the top surface (see for example, reference numeral 140; Fig. 2; page 9, lines 20-21) of the base member (see for example, reference numeral 124; Figs. 2 and 3; page 1, line 15, page 5, line 1 to page 6, line 13, page 7, lines 1-3 and 15-16,

page 8, lines 7-8 and 18 to page 9, line 7, page 9, line18-21), wherein the laser cutting system (see for example, reference numeral 112; Figs. 2 and 3; page 4, lines 14-18, page 5, line 19 to page 6, line 4, page 8, lines 9-11, page 9, line 18 to page 10, line 15, page 12, line 17 to page 13, line 5) includes a laser/water jet hybrid (see for example, reference numeral 112; page 10, lines 11-15); a rotary motor (see for example, reference numeral 120; Figs. 2-3; page 4, lines 14-22, page 5, line 11 to page 6, line 4, page 7, lines 15-16, page 9, lines 8-17, page 12, lines 18-23) attached to the first motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23), wherein the rotary motor (see for example, reference numeral 120; Figs. 2-3; page 4, lines 14-22, page 5, line 11 to page 6, line 4, page 7, lines 15-16, page 9, lines 8-17, page 12, lines 18-23) is positioned below the first motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23); and a tubular workpiece (see for example, reference numeral 16; Figs. 1-3; page 2, line 8 to page 3, line 16, page 4, lines 16-18, page 6, lines 14-15, page 7, lines 7-19, page 8, lines 9-15, page 9, line 23 to page 10, line 6, page 10, line 16 to page 12, line 17, page 12, line 18 to page 13, line 5) connected to the rotary motor (see for example, reference numeral 120; Figs. 2-3; page 4, lines 14-22, page 5, line 11 to page 6, line 4, page 7, lines 15-16, page 9, lines 8-17, page 12, lines 18-23); wherein the tubular workpiece (see for example, reference numeral 16; Figs. 1-3; page 2, line 8 to page 3, line 16, page 4, lines 16-18, page 6, lines 14-15, page 7, lines 7-19, page 8, lines 9-15, page 9, line 23 to page 10, line 6, page 10, line 16 to page 12, line 17, page 12, line 18 to page 13, line 5) is positioned below the first motor (see for example, reference numeral 118, Figs. 2-3, page 4, lines 14-17, page 5, lines 1-22, page 6, line 18 to page 7, line 7, page 8, lines 11-17, page 9, lines 8-13, page 12, lines 21-23).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1, 5, 7-8, 11-17, and 19 are patentable under 35 U.S.C. 103(a) over Acciai et al. (U.S. Patent No. 5,855,802) in view of Pacetti et al. (U.S. Patent

No. 6,695,920), McCoy (U.S. Published Patent Application No. 2003/0234243), and Applicant's Admitted Prior Art (AAPA).

2. Whether claims 1, 5, 7-8, 11-17, and 19 are patentable over Acciai et al. (U.S. Patent No. 5,855,802) in view of Pacetti et al. (U.S. Patent No. 6,695,920), McCoy (U.S. Published Patent Application No. 2003/0234243), and Kranz (U.S. Patent No. 6,197,047).

3. Whether claims 6 and 18 are patentable over Acciai et al. (U.S. Patent No. 5,855,802) in view of Pacetti et al. (U.S. Patent No. 6,695,920), McCoy (U.S. Published Patent Application No. 2003/0234243), and (Applicant's Admitted Prior Art (AAPA) or Kranz (U.S. Patent No. 6,197,047)), and further in view of Magnante (U.S. Patent No. 6,086,204) under 35 U.S.C. 103(a)

VII. ARGUMENT

A. CLAIMS 1, 5, 7-8, 11-17, AND 19 ARE PATENTABLE OVER ACCIAI ET AL. (U.S. PATENT NO. 5,855,802) IN VIEW OF PACETTI ET AL. (U.S. PATENT NO. 6,695,920), MCCOY (U.S. PUBLISHED PATENT APPLICATION NO. 2003/0234243), AND APPLICANT'S ADMITTED PRIOR ART (AAPA) UNDER 35 U.S.C. 103(a)

1. All words in a claim must be considered in judging the patentability of that claim against the prior art.

Each of the rejections is based primarily upon Acciai in view of Pacetti and McCoy. Accordingly an initial discussion of the references will present the primary issues to be addressed in the appeal.

In the final Office Action of August 10, 2009, the Examiner acknowledged numerous deficiencies of the Acciai reference as applied to independent claims 1 and 13:

> "Acciai et al. does not teach all the elements mounted to one table, the coupling of the linear and rotary motors, the presence of guides, the workpiece below the motor(s), the direct cutting using a laser, or the use of a coolant."

In addition, the Examiner has also acknowledged that Acciai does not disclose "a laser cutting system includes a laser/water jet hybrid" to be discussed below.

Acciai does not teach a laser cutting system, direct or indirect, of any kind and relies instead upon exposure and subsequent development of a light-sensitive coating followed by etching steps to remove unexposed portions of the coating and the immediately underlying portions of the solid wall. (Col. 1, lines 56-61.) Accordingly, those portions of the tubular wall which are exposed to laser illumination in the apparatus of Acciai are not removed, whether directly or indirectly. No portions of a workpiece of Acciai, including the light-sensitive coating, are "cut" by the laser of Acciai. For at least this reason, all subsequent proposed modifications to the apparatus of Acciai which introduce a laser cutting system necessarily involve impermissibly alteration of the principle of operation of Acciai. (See MPEP § 2143.01, Part VI.)

In the Advisory Action, the Examiner asserts that Appellants argue that Acciai does not disclose direct cutting and notes that direct cutting is not a claim element. The issue of direct cutting was introduced by the Examiner in an enumeration of the deficiencies of Acciai. Instead, Appellants have argued that the apparatus of Acciai does not include a laser cutting system. Appellants note that were the laser found in Acciai, said laser being adapted to expose a light-sensitive coating, to be replaced by a laser cutting system, the resulting apparatus would remove those portions of the workpiece which are to be retained and would leave those portions which are intended to correspond to holes in the workpiece thereby rendering the apparatus of Acciai unsatisfactory for its intended purpose. (See MPEP § 2143.01 Part V.) This would be the case whether the laser merely removed the light-sensitive coating of Acciai or cut the material of the workpiece.

The Examiner has asserted that the coating apparatus of Pacetti provides a rotational motor (24) coupled to a linear motor (28), an arrangement depicted in Figure 2 as positioning both the rotary motor and the stent above the motor (28) rather than below as recited in independent claims 1 and 13. [The motors of Acciai are mounted separately,

a rotary motor turning the stent and a stepper motor moving a portion of the laser illumination system relative to the stent, presumably by means of a lead screw or a rack and pinion system. The motor (28) of Fig. 2 of Pacetti is described only as: "Another motor 28 can also be provided for moving mandrel 20 and thus stent 10 in a linear direction, back and forth, along a rail 30." with no indication that motor (28) is a linear motor. As depicted in Fig. 3, the table (64) for moving the optical element is positioned by a stepper motor (70) rather than a linear motor. The rotary drive motor (38) is mounted above the stepper motor (70). Other arrangements are contemplated; however none of them explicitly place a rotary motor below a linear motor.]

The gear members (22) and rail (30) of Pacetti are said to provide guide members. Instead, the gears of Pacetti appear to be mere support structures which transmit torque to the stent and engage in minimal contact therewith. (Col. 3, lines 15-26.) Thus they do not appear to provide "guides" which position the stent and, since Pacetti does not cut the stent, do not appear to provide a pre-cut guide and post-cut guide as recited in independent claim 1. Pacetti does not teach that the workpiece (10) is coupled to a rotary motor (24) or that the gears (22) are coupled to workpiece (10) as recited in claim 1. Instead, motor (24) of Pacetti is coupled to shaft (20) which is coupled to gears (22) upon which workpiece (10) rests.

Were the imprecise drive system of Pacetti's coating apparatus to be substituted for the relatively precise drive system employed in the light-sensitive coating exposure system of Acciai, the result would appear to render the system of Acciai unsuited for precision fabrication and the mandrel (20), gears (22), and optional barrier members (36), if present, would appear to prevent the lower focused laser beam (62), provided by bifurcated guide (46), from exposing a light-sensitive coating on the inner surface of the stent as required by the operating principle of Acciai.

The coating apparatus of Pacetti does not provide the missing laser cutting system, a single mounting table, pre- and post-cutting guides, mounting of the workpiece below the motors, or the use of a coolant, all elements acknowledged to be missing from Acciai. The Advisory Action only reasserts that Pacetti teaches a rotary motor and a linear motor.

The Examiner has asserted that McCoy "discloses a multi-axis laser apparatus for the fine cutting of tubing". In addition, the Examiner has indicated: "A water system is incorporated in the apparatus to remove **debris falling** into the interior of the cut tube and to push discrete portions of the cut tube (or stents) into a parts catcher to separate the stent from the uncut portion of the tube." (Emphasis in the original at page 3 of the final Office Action.) The Examiner's comments indicate that McCoy is intended to supply a laser cutting system and a coolant acknowledged to be missing from Acciai and not found in Pacetti.

As noted above, replacing the light-sensitive coating exposure system of Acciai with a laser cutting system of McCoy would impermissibly alter the operating principle of Acciai. Arguably, the debris removal system of McCoy may, under some circumstances, provide an incidental cooling effect; however this function is not taught by McCoy and is not necessarily present in the apparatus of McCoy as would be required to assert inherent function. McCoy has indicated that the water system removes debris which has fallen into the tube, and thus would be located at the bottom of the tube, while cutting occurs at the outside top of the tube prior to break-through. Rather than providing a coolant as suggested by the Examiner, McCoy explicitly teaches heating the workpiece and thus teaches away from the use of a coolant:

> [0031] A gas (oxygen) is injected through a nozzle 32 that helps to remove debris from the kerf formed in the tubing 21 and heats the region where the laser beam 24 interacts with the material as the beam cuts, and aids in vaporizing the metal.

McCoy does not teach that all elements are mounted to one table, the mounting of a rotary motor below a linear motor, the mounting of the workpiece below the motors, or the use of a coolant. McCoy does not teach the use of a post-cutting guide since there does not appear to be any portion of tube (21) which contacts the apparatus to the left of the region in which laser cutting occurs. (See Fig. 2.)

For at least the above reasons, Acciai in view of Pacetti and McCoy fails to teach all the claim limitations found in independent claims 1 and 13, as is required to establish a *prima facie* case of obviousness.

Turning now to the secondary references, Appellants note the disclosure which the Examiner has labeled as Applicants' Admitted Prior Art (AAPA) is nothing more

than an acknowledgment of a commercial source for a component useful in the device. Accordingly, AAPA does not overcome the deficiencies of Acciai in view of Pacetti and McCoy with respect to the remaining missing elements of claims 1 and 13 as discussed above.

Appellants respectfully request that the rejections of independent claims 1 and 13 over Acciai in view of Pacetti, McCoy, and AAPA be overruled.

2. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.

Claims 5, 7-8, 11, 12, 14-17, and 19, which depend from nonobvious independent claims 1 and 13 respectively, also are believed to be nonobvious and Appellants respectfully request that the rejections be overruled.

B. CLAIMS 1, 5, 7-8, 11-17, AND 19 ARE PATENTABLE OVER ACCIAI ET AL. (U.S. PATENT NO. 5,855,802) IN VIEW OF PACETTI ET AL. (U.S. PATENT NO. 6,695,920), MCCOY (U.S. PUBLISHED PATENT APPLICATION NO. 2003/0234243), AND KRANZ (U.S. PATENT NO. 6,197,047) UNDER 35 U.S.C. 103(a).

As discussed above, Acciai in view of Pacetti and McCoy fails to teach all the claim limitations found in independent claims 1 and 13, as is required to establish a *prima facie* case of obviousness.

Kranz is characterized by the Examiner as providing a "water laser". That term is not found in the pending application. It is presumed that the Examiner intended to provide a laser/water jet hybrid which is found in independent claims 1 and 13. The cited portion of Kranz is:

> "In a preferred embodiment of a stent according to the invention the partition lines are of a width substantially corresponding to that of a clean incision when the surface is severed by means of a cutting beam, e.g. **a cutting jet of water preferably a laser beam**. Narrow partition lines give the non-expanded stent particularly high stability." (Col. 2, lines 28-33; emphasis added by the Examiner.)

Appellants believe that the passage includes a typographical error in that it appears to be missing at least "or" between "... water" and "preferably ..."

This may be seen by comparison with column 6, lines 1-5:

"It is possible to use a water jet cutting process to produce the partition lines. However a laser beam is preferably used as the cutting beam, firstly because very high cutting precision can be obtained, and secondly because the mechanical strains on the stent are minimized."

Accordingly Kranz does not overcome the deficiencies of Acciai in view of Pacetti and McCoy with respect to the remaining missing elements of claims 1 and 13 as discussed above. Appellants respectfully request that the rejections of independent claims 1 and 13 over Acciai in view of Pacetti, McCoy, and Kranz be overruled.

Claims 5, 7-8, 11, 12, 14-17, and 19, which depend from nonobvious independent claims 1 and 13 respectively, also are believed to be nonobvious and Appellants respectfully request that the rejections be overruled.

C. CLAIMS 6 AND 18 ARE PATENTABLE OVER ACCIAI ET AL. (U.S. PATENT NO. 5,855,802) IN VIEW OF PACETTI ET AL. (U.S. PATENT NO. 6,695,920), MCCOY (U.S. PUBLISHED PATENT APPLICATION NO. 2003/0234243), AND (APPLICANT'S ADMITTED PRIOR ART (AAPA) OR KRANZ (U.S. PATENT NO. 6,197,047)), AND FURTHER IN VIEW OF MAGNANTE (U.S. PATENT NO. 6,086,204) UNDER 35 U.S.C. 103(a).

As noted above, neither Acciai in view of Pacetti, McCoy, and AAPA nor Acciai in view of Pacetti, McCoy, and Kranz teach all the claim limitations found in claims 1 and 13, as is required to establish a *prima facie* case of obviousness and the missing elements overlap significantly. Accordingly, Acciai in view of Pacetti, McCoy, and ((AAPA or Kranz) does not appear to overcome the previously noted deficiencies of Acciai as applied to independent claims 1 and 13.

The Examiner asserts that Magnante discloses a machine which "rests on **granite base** 36". (Emphasis added by the Examiner.) It should be noted that a granite base does

not appear in independent claims 1 and 13 and thus Magnante does not overcome the deficiencies of the references with respect to those claims. Further, were the various components of claims 1 and 13 to rest on the granite base of Magnante, at least some of them would be incapable of assuming the positions recited in claims 1 and 13.

Accordingly claims 6 and 18, which depend from nonobvious independent claims 1 and 13 respectively, also are believed to be nonobvious and Appellants respectfully request that the rejections of claims 6 and 18 be overruled.

D. CONCLUSION.

For the reasons stated above, claims 1, 5, 7-8, 11-17, and 19 are nonobvious over Acciai et al. in view of Pacetti et al., McCoy, and Applicant's Admitted Prior Art (AAPA); claims 1, 5, 7-8, 11-17, and 19 are nonobvious over Acciai et al. in view of Pacetti et al., McCoy, and Kranz; claims 6 and 18 are nonobvious over Acciai et al. in view of Pacetti et al., McCoy, and (Applicant's Admitted Prior Art (AAPA) or Kranz)), and further in view of Magnante; and the Examiner's rejections of claims 1, 5-8, and 11-19 under 35 U.S.C § 103 should be overruled.

Respectfully submitted,

KENNETH MERDAN ET AL.

By their Attorney,

Date: March 22, 2010

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VIII. CLAIMS APPENDIX

1. A device for manufacturing an intravascular stent, comprising:

a base having a first surface and a second surface;

a laser cutting system attached to the first surface of the base, wherein the laser cutting system includes a laser/water jet hybrid;

a linear motor attached to the second surface of the base;

a rotary motor coupled to the linear motor, wherein the rotary motor is positioned below the linear motor;

a workpiece coupled to the rotary motor, the workpiece positioned below the linear motor;

a pre-cut guide coupled to the workpiece; and

a post-cut guide coupled to the workpiece.

2-4. (canceled)

5. The device of claim 1, further comprising a fluid that is passed onto or through the workpiece.

6. The device of claim 1, wherein the base includes granite.

7. The device of claim 1, wherein the linear motor is configured to move the workpiece horizontally.

8. The device of claim 1, wherein the linear motor is upside-down.

9-10. (canceled)

11. The device of claim 1, wherein the laser cutting system is configured to transmit laser energy in the horizontal direction.

12. The device of claim 11, further comprising a tuning mirror that reflects the horizontally transmitted laser energy from the horizontal direction to the vertical direction.

13. A device for cutting a stent from a tube, comprising:

a base member having a top surface and a bottom surface;

a first motor having a top surface and a bottom surface, the bottom surface of the first motor being attached to the bottom surface of the base member, such that the first motor is attached upside-down to the base member;

a laser cutting device attached to the top surface of the base member, wherein the laser cutting system includes a laser/water jet hybrid;

a rotary motor attached to the first motor, wherein the rotary motor is positioned below the first motor; and

a tubular workpiece connected to the rotary motor;

wherein the tubular workpiece is positioned below the first motor.

14. The device of claim 13, further comprising one or more guides coupled to the base member.

15. The device of claim 13, further comprising one or more guides coupled to a base portion of the first motor.

16. The device of claim 13, further comprising one or more guides coupled to an interface plate of the first motor.

17. The device of claim 13, further comprising a fluid that is passed onto or through the workpiece.

18. The device of claim 13, wherein the base member includes granite.

19. The device of claim 13, wherein the first motor is configured to move a workpiece horizontally.

20-29. (canceled)

IX. EVIDENCE APPENDIX

No additional evidence has been presented.

X. RELATED PROCEEDINGS APPENDIX

None.